

السؤال الثالث: ضع خط تحت الاجابة الصحيحة للعبارة الآتية: (٢٠ درجات)

- ١- من مواصفات التقرير الجيد ان يكون : (دقيق - مقنع - موضوعي - كل ما سبق)
- ٢- لعلاج الشائعات: (المنطقية في التعامل مع الأخبار - تأكد من صحة الخبر ومصدره - التوعية - كل ما سبق)
- ٣- من الأهداف العامة التي تسعى السلامة والصحة المهنية لتحقيقها : (حماية العنصر البشري - توفير وتنفيذ كافة شروط السلامة - الحفاظ على العنصر المادي - كل ما سبق)
- ٤- في معمل فحص الطفيليات الطبية لابد من توفير: (مرشحات تنقية الهواء - مصادر تهوية - طفاية حريق - كل ما سبق)
- ٥- حدد المجلس الأعلى للجامعات الا تزيد نسبة الاقتباس في البحث العلمي عن: (٤٥٪ - ٥٥٪ - ٢٥٪ - ١٠٪)
- ٦- من الآداب العامة لمزاولة مهنة المختبرات الطبية: (التكبر - الإفشاء - المسؤولية - كل ما سبق)
- ٧- يجب ان تحتوى شئمة الاسعافات الأولية على : (مطهرات - منبهات - مسكنات - كل ما سبق)
- ٨- من نفايات العامل (اطباق مزارع بكتيرية - نفايات كيميائية - بقايا احياء - كل ما سبق)
- ٩- من عقبات تطبيق اخلاقيات المهنة: (الاهمال-التواكل-غياب القدوة الحسنة- كل ما سبق)
- ١٠- التبليغ خلال ٤٨ ساعة في حالة اكتشاف تحاليل ايجابية لمرض: (الجرب - شلل الأطفال - الكوليرا- كل ما سبق)
- ١١- من يعد ميثاق اخلاقيات المهنة ؟ (رئيس المؤسسة- فريق عمل المؤسسة - لجنة - كل ما سبق)
- ١٢- هي الجرعة القاتلة لنصف عدد حيوانات التجارب. (LD50 - LC50 - LEL)
- ١٣- المستنول عن إنجاز التجارب العملية المقررة بالمناهج الدراسية: (محضر المختبر - المعلم - المشرف - كل ما سبق)
- ١٤- من انواع البلاجياريزم (النسخ - الترقيع - اعادة الصياغة - كل ما سبق)
- ١٥- قبل تشغيل جهاز جديد أو استعمال مادة يجب قراءة (نشرة التشغيل - نشرة الأمان - العلامات الارشادية - كل ما سبق)
- ١٦- من مجالات الاخلاقيات البيولوجية (الاستنساخ - القرصنة البيولوجية - سرقة الجينات - كل ما سبق)
- ١٧- من الاخلاقيات المهنية المشتركة بين المهن (الضمير المهني - الاهمال - عدم تحمل المسؤولية - كل ما سبق)
- ١٨- الرعاف هو (نزيف دموي من الانف - رعشة الجسم - صدمة عصبية - كل ما سبق)
- ١٩- تعني (جس نبض) المجتمع حول قضية معينة وهي تخص مسائل الشرف والسمعة وهي قد تكون كارثية. (الشائعة السريعة - الشائعة البطيئة - الشائعة الاستطلاعية - كل ما سبق)
- ٢٠- من اشتراطات انشاء مختبرات العلوم (ملائمة المساحة مع عدد المستخدمين - توافر بابين - لها إضاءة وتهوية جيدة - كل ما سبق)

انتهت الأسئلة

مع تمنياتي بالتفوق

أ.د. ناصر الشيمي

الزمن: ساعتان ٣١ أغسطس ٢٠٢٥	 	امتحان نهاية الفصل الدراسي الصيفي :جميع المستويات المقرر: أخلاقيات المهنة والسلامة المهنية رقم المقرر ورمزه: F300
الاجابة في نفس ورقة الاسئلة	كلية العلوم	

أجب عن الاسئلة الآتية:

(٢٠ درجة)

السؤال الاول: ضع علامة ✓ او X للعبارات الآتية:

- ١- ضرورة استخدام معدات الوقاية والسلامة الشخصية بعد العمل وعدم الاستهانة باهميتها ()
- ٢- الميثاق الأخلاقي هو مجموعة من القيم العليا التي تسعى المؤسسة إلى الالتزام بها أثناء ممارسة العمل. ()
- ٣- يشترط في الاقتباس المباشر كتابه اسم مؤلف النص المنقول فقط . ()
- ٤- التقرير هو عرض كتابي أو شفوي منهجي مركز لموضوع معين يقدمه فرد أو مجموعه. ()
- ٥- يؤدي النهوض بالملكية الفكرية إلى دفع عجلة التنمية الاقتصادية وإتاحة فرص عمل وصناعات جديدة. ()
- ٦- تستخدم طفاية الرغاوى لإطفاء الحرائق الناتجة عن المواد السائلة القابلة للاشتعال مثل الكحول والمذيبات. ()
- ٧- تدخل السلامة والصحة المهنية في كل مجالات الحياة ()
- ٨- من خصائص الميثاق الأخلاقي للمهنة حماية المهنة والجمهور العام بقواعد أخلاقية تسهل التعامل. ()
- ٩- من أخلاقيات مهنة التعليم المفضلة من قبل الطلبة إرهابهم بكثرة النشاطات البيتية. ()
- ١٠- عند تخفيف الأحماض المركزة يجب إضافة الحمض للماء والعكس غير صحيح. ()
- ١١- الالتزام بمعايير الجودة من الأخلاقيات الهامة لأي مهنة . ()
- ١٢- توفير طفاية حريق و جهاز كاشف الحرائق من شروط الامن والسلامة في المختبر. ()
- ١٣- أخلاقيات المهنة تعني فقط الالتزام بالقوانين والقواعد القانونية الحاكمة للعمل. ()
- ١٤- العمل يقتضي الاتقان بينما المهنة قد يتولاها غير المتقن. ()
- ١٥- من اهم اخلاقيات المهنة التي يجب ان تتوفر في الاستاذ او المعلم التواصل مع طلابه بمختلف مستوياتهم الفكرية وتقريبه منهم. ()
- ١٦- من صفات الشخصية السوية عدم الاتزان الانفعالي في مواجهة المواقف والأحداث. ()
- ١٧- الحصول على عمل بأتعاب متدنية للغاية تحت ضغط التنافس يترتب عليه تقديم خدمة ذات مستوى متواضع على أقل تقدير. ()
- ١٨- الالتزام بأخلاقيات العمل يسهم في شيوع الرضا الاجتماعي بين غالبية الناس كنتيجة لعدالة التعامل. ()
- ١٩- يفيد الاستئناس في المحافظة على السلالات النادرة سواء كانت نباتية أو حيوانية المعرضة للانقراض. ()
- ٢٠- من أخلاقيات البحث العلمي الصدق والأمانة في جميع البيانات. ()

(١٠ درجات)

السؤال الثاني: اكتب مدلول علامات التحذير والسلامة المهنية الآتية:



28) How does learning by trial and error differ from operant conditioning?

- a) only trial and error involves specific animal responses
- b) only operant conditioning involves specific responses before rewards
- c) trial and error has a more obvious ethological factor

29) The egg-rolling behavior of the graylag goose is considered adaptive because:

- a) it helps the mother retrieve lost eggs
- b) it increases the number of offspring
- c) it evolved through a long evolutionary history

30) Imo, the Japanese macaque on Koshima Island used water to separate grains from sand:

- a) through rational imitation
- b) through operant conditioning
- c) through insight learning

Part II. Answer only four of the following questions:

(20 marks)

- 1) Mention the types of human pheromones, providing specific examples for each type.
- 2) Discuss the Vandenberg effect and compare it with the Bruce effect.
- 3) Insects utilize various releaser pheromones for communication. Identify the different types of these pheromones and provide a detailed explanation of alarm pheromones and social pheromones.
- 4) Explain the process of operant conditioning in animals, including how it is considered a better process for learning.
- 5) Identify the primary characteristics of innate behavior and provide a detailed explanation of two of these characteristics.

_____ End of questions _____

Examiner: Prof. Medhat M. Sadek

20) Which of the following is a consequence of self-recognition?

- a) self-awareness, empathy, mental time travel
- b) better hunting skills, nest building, and hunting
- c) faster escape from enemies

21) The brain region responsible for recognizing others is:

- a) right prefrontal cortex
- b) left prefrontal cortex
- c) cerebellum

22) Children under 2.5–3 years are unable to recognize themselves in a mirror because:

- a) their left prefrontal cortex is not developed
- b) their right prefrontal cortex is not fully developed
- c) they lack visual ability

23) What type of learning was Wolfgang Köhler a pioneer in studying?

- a) operant conditioning
- b) social learning
- c) insight learning

24) Arithmetic abilities were discovered in:

- a) only primates
- b) only mammals
- c) certain mammals, birds and invertebrates

25) Which pheromones can function without the sender and receiver being present simultaneously?

- a) alarm and marking pheromones
- b) marking and trail pheromones
- c) trail and aggregation pheromones

26) How might the axillary odor of a breastfeeding mother function?

- a) as a releaser pheromone
- b) as a primer pheromone
- c) as a modulator pheromone

27) How is a brown, rough, glassy bottle perceived by a male Australian jewel beetle?

- a) as a conditioned stimulus
- b) as a normal releaser
- c) as a supernormal releaser

11) In the mirror test, marks are placed on:

- a) body parts visible without a mirror
- b) body parts that can only be seen by a mirror
- c) ears and teeth

12) The horse, Clever Hans, was able to:

- a) count and calculate
- b) responded to changes in human faces
- c) read numbers

13) Hexadecanal affects brain regions linked to:

- a) motor coordination
- b) social cue perception
- c) auditory cortex

14) Arithmetic ability in animals can include:

- a) simple counting, comparing quantities, arranging numbers
- b) only memorizing numbers
- c) solving algebraic equations

15) In humans, hexadecanal is secreted mainly by:

- a) salivary glands
- b) skin glands
- c) both salivary and skin glands

16) The "Clever Hans Effect" refers to:

- a) arithmetic ability in horses
- b) unintentional communication between researcher and subject
- c) a way to teach animals mathematics

17) The amount of hexadecanal produced by babies is:

- a) smaller than the amount produced by adults
- b) equal to the amount produced by adults
- c) larger than the amount produced by adults

18) When chimpanzees arrange numbers, they do so:

- a) in descending order only
- b) in ascending order
- c) randomly

19) Animals that passed the mirror test include:

- a) dogs and cats
- b) dolphins, elephants and magpies
- c) horses and chimpanzees



Assiut University
Faculty of Science
Zool. & Entomol. Dept.

Final Exam. for Science Students
Animal Behavior (313 Z)

Summer semester,
2025
Time: Two hours



The exam comes on four pages

Total: 50 marks

Part I. Choose the correct answer and transfer its number to the answering notebook: (30 marks)

- 1) Which animals can combine two short sticks to create a longer one?
a) elephants b) macaque monkeys c) chimpanzees
- 2) What does comparative psychology primarily study?
a) behavior b) adaptive features c) mental abilities
- 3) What is the focus of comparative psychology?
a) behavior b) ethology c) sociobiology
- 4) What can trial-and-error learning experiments assess in animals?
a) ability to learn b) rate of learning c) adaptive behaviors
- 5) The gland that contributes to the human odor fingerprint is:
a) mammary gland b) apocrine glands c) salivary gland
- 6) What type of pheromone allows mothers to distinguish their babies by odor?
a) releaser pheromone b) signaler pheromone c) modulator pheromone
- 7) Which of the following is an example of a supernormal releaser that humans respond to?
a) dressings b) eye colour c) smiling
- 8) What type of pheromones are most common in mice?
a) primer pheromones b) releaser pheromones c) alarm pheromones
- 9) Receiving hexadecanal in men generally:
a) increases aggression b) decreases aggression c) has no effect
- 10) Where has comparative psychology primarily studied animal behavior?
a) in the field
b) in the laboratory
c) both in the field and laboratory

10. The second intermediate host of *Diphyllobothrium latum* is

- (a) Snails
- (b) Fish
- (c) Frogs
- (d) Cyclops

11. Diagnostic stage of *Plasmodium* spp. in human blood is

- (a) Ring stage
- (b) Sporozoites
- (c) Merozoites
- (d) Trophozoite

12. The diagnostic stage of *Taenia* spp. is

- (a) Blood in urine
- (b) Egg in feces
- (c) Egg in urine
- (d) Cercariae in water

13. Nematodes are differentiated from other worms by the following except

- (a) Absent fragmentation
- (b) Flat or flashy leaf-like worm
- (c) Separate sexes
- (d) cylindrical body

14. Which one of the parasites can be transmitted through contaminated vegetables?

- (a) *Enterobius vermicularis*
- (b) *Taenia solium*
- (c) *Schistosoma mansoni*
- (d) *Diphyllobothrium latum*

15. Auto-infection could be propagated by

- (a) *Ascaris* sp.
- (b) *Ancylostoma* sp.
- (c) *Taenia saginata*
- (d) none of the above

B- Discuss with labelled diagrams the life cycle of *Toxoplasma gondii*?

(10 Marks)

C- Compare between *Taenia saginata* and *Taenia solium*?

(7 Marks)

D- From your study, mention three parasites transmitted to human through contaminated fish?

(10 Marks)

E- Explore three protozoans cause diarrhea to human, mention infective stage, habitat, and mode of infection?

(8 Marks)

Good luck..... Dr. Sara S. Abdel-Hakeem



Answer the following question (illustrating your answer with labeled drawings whenever possible)

A- Select the single best answer for each of the following (1 marks/ each)

1. Infective stage of *Heterophyes heterophyes* is encysted in

- (a) Grasses
- (b) Snails
- (c) Sheep
- (d) Fish

2. Platyhelminthes and Nematodes are different in the following except

- (a) Triploblastic
- (b) Monocleous
- (c) Digestive system
- (d) Adhesive organs

3. Large trophozoite of *Entamoeba histolytica* feeds on

- (a) RBC and mucosa
- (b) blood
- (c) Digested food
- (d) Mucosa in the colon

4. Infection with *Trypanosoma cruzi* occurs by

- (a) Contamination of wound with feces
- (b) Blood transfusion
- (c) Congenital transmission
- (d) All the above

5. *Giardia lamblia* cyst contains

- (a) 2 nuclei
- (b) 4 nuclei
- (c) 6 nuclei
- (d) 8 nuclei

6. Infective stage of *Entamoeba gingivalis* is

- (a) Trophozoite
- (b) cyst
- (c) quadrinucleated cyst
- (d) tachyzoites

7. Which of the following protozoans is transmitted primarily by the motile trophozoite form?

- (a) *Balantidium coli*
- (b) *Entamoeba histolytica*
- (c) *Giardia lamblia*
- (d) *Trichomonas vaginalis*

8. The intermediate host of *Fasciola gigantica* is

- (a) Cattle
- (b) Pigs
- (c) Cyclops
- (d) Snails

9. Consumption of uncooked fish is likely to cause which of the following helminthic disease

- (a) *Diphyllobothrium latum*
- (b) *Taenia saginata*
- (c) *Fasciola hepatica*
- (d) *Echinococcus granulosus*

9. Nematodes are differentiated from other worms by the following except

- (a) Absent fragmentation
- (b) cylindrical body
- (c) Flat or fleshy leaf-like worm
- (d) separate sexes

10. Parasites that are to a given host, but in an abnormal situation are called

- (a) Obligatory parasites
- (b) Erratic parasites
- (c) Incidental parasites
- (d) Permanent parasites

B- Fill in the blank

(8 marks)

1. *Balantidium coli* lives in and they may reproducing by.....
2. Infection with *Diphyllobothrium latum* is due tobut infection with *Taenia saginata* is due to
3. The association between two organisms may be symbiosis, which means.....and Parasitism, which means.....
4. Zoonoses is
5. Infection with *Enterobius vermicularis* is due to.....

C- Differences between *Schistosoma mansoni* and *Schistosoma haematobium* in the following items (habitat, intermediate host, infective stage, and eggs)?

(10 Marks)

D- Write briefly (with drawing) on detailed life cycle of one parasite transmitted to human through consumption of cattle meat? (7 Marks)

E- Discuss the sexual cycle of *Plasmodium* sp. in stomach of mosquito? (7 Marks)

(7 Marks)

F- Write short note on reproductive system in Platyhelminthes? (8 Marks)

(8 Marks)

Good luck

Dr. Sara S. Abdel-Hakeem



2025

Answer the following question (illustrating your answer with labeled drawings whenever possible)

A- Choose the one correct answer: (1 mark/ each)

1. Metacercaria is an infective stage in the following parasites except

- | | |
|-------------------------------|------------------------------------|
| (a) <i>Fasciola gigantica</i> | (b) <i>Heterophyes heterophyes</i> |
| (c) <i>Fasciola hepatica</i> | (d) <i>Dipyllobothrium latum</i> |

2. The digestive system is absent in

- | | |
|--------------------------------|------------------------------------|
| (a) <i>Taenia saginata</i> | (b) <i>Enterobius vermicularis</i> |
| (c) <i>Schistosoma mansoni</i> | (d) <i>Wuchereria bancrofti</i> |

3. All the following protozoa live in the intestine except

- | | |
|--------------------------------|-----------------------------|
| (a) <i>Trichomonas hominis</i> | (b) <i>Plasmodium</i> spp |
| (c) <i>Entamoeba coli</i> | (d) <i>Balantidium coli</i> |

4. Infective stage of *Ascaris lumbricoides* is

- | | |
|-----------------------|---------------------|
| (a) filariform larvae | (b) Embryonated egg |
| (c) Metacercaria | (d) Cyst |

5. The diagnostic stage of *Schistosoma haematobium* is

- | | |
|----------------------|------------------------|
| (a) Egg in the blood | (b) Egg in feces |
| (c) Egg in urine | (d) Cercariae in water |

6. All the following parasites lead to bloody diarrhea except

- | | |
|----------------------------------|------------------------------------|
| (a) <i>Schistosoma mansoni</i> | (b) <i>Schistosoma haematobium</i> |
| (c) <i>Entamoeba histolytica</i> | (d) <i>Trypanosoma</i> spp. |

7. Contaminated green salad causes infection with

- | | |
|---------------------------------|---------------------------------|
| (a) <i>Acanthamoeba</i> sp | (b) <i>Plasmodium</i> spp. |
| (c) <i>Ascaris lumbricoides</i> | (d) <i>Wuchereria bancrofti</i> |

8. Consumption of uncooked fish is likely to cause which of the following helminthic disease

- | | |
|----------------------------------|------------------------------------|
| (a) <i>Dipyllobothrium latum</i> | (b) <i>Taenia saginata</i> |
| (c) <i>Fasciola hepatica</i> | (d) <i>Echinococcus granulosus</i> |

The cells produced after repeated mitotic division of primordial germ cells are known as:
a) Primary spermatocytes b) Spermatogonia c) Secondary spermatocytes d) Spermatids

20. The mesodermal somites in *Amphioxus* divide into:

- a) Epiblast and hypoblast b) Epimere and hypomere c) Neural tube and notochord d) Macromeres

21. Which cavity forms inside the mesodermal epimere?

- a) Splanchnocoel b) Myocoel c) Blastocoel d) Archenteron

22. The type of cleavage in toad eggs is:

- a) Holoblastic equal b) Meroblastic discoidal c) Holoblastic unequal d) Superficial

23. The gray crescent appears in the region that will become the:

- a) Ventral side b) Animal pole c) Dorsal lip of the blastopore d) Notochord

24. What is the significance of the gray crescent in toad development?

- a) It prevents cleavage b) It initiates neural development
c) It is necessary for normal development d) It causes pigmentation

25. The roof of the blastocoele in the toad is formed by:

- a) Macromeres b) Neural plate c) Micromeres d) Gastrula

26. The cavity formed during invagination in toad gastrulation is:

- a) Blastocoel b) Neurenteric canal c) Gastrocoel or archenteron d) Yolk sac

27. The primitive groove lies:

- a) Along the primitive streak b) Between neural folds c) In the area opaca d) In the yolk sac

28. Which mesodermal region is devoid of mesoderm cells initially?

- a) Proamnion b) Area opaca c) Somites d) Epiblast

29. The notochord in chick embryo forms from cells of:

- a) Hensen's node b) Area opaca c) Neural tube d) Hypoblast

- Which enzyme helps sperm penetrate the corona radiata?
- a) Hyaluronidase b) Trypsin-like enzyme c) Acid phosphatase d) Corona penetrating enzyme

10. What is the enzyme presumed to be located on the inner acrosomal membrane that helps sperm penetrate the zona pellucida?
- a) Hyaluronidase b) Corona penetrating enzyme c) Trypsin-like enzyme or acrosin d) Amylase

11. What is polyspermy?
- a) The entry of only one sperm into the egg b) The entry of more than one sperm into the egg
c) The production of multiple eggs d) The inability of sperm to fertilize an egg

12. What type of cleavage occurs in Amphioxus?
- a) Meroblastic unequal b) Holoblastic equal c) Meroblastic discoidal d) Superficial

13. What structure does the blastocoele form inside the blastula of Amphioxus?
- a) Fluid-filled cavity b) Archenteron c) Notochord d) Neural groove

14. The early blastula of Amphioxus is also known as:
- a) Coeloblastula b) Amphiblastula c) Discoblastula d) Blastocyst

15. During gastrulation in Amphioxus, the invagination starts at which pole?
- a) Animal pole b) Lateral side c) Vegetal pole d) Posterior side

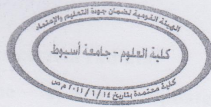
16. Which structure forms from the ectodermal thickening in Amphioxus?
- a) Notochord b) Mesoderm c) Neural plate d) Archenteron

17. The cavity inside the neural tube is called:
- a) Blastocoel b) Neurocoel c) Gastrocoel d) Somite

18. In Amphioxus, the mesoderm arises from:
- a) Ectoderm b) Endodermal roof of archenteron c) Floor of blastocoele d) Epiblast



Assiut University
Faculty of Science
Zoology & Entomology
Department



Time: 2 hour
Level: three
Course Code: 334Z
Date: 31 / 8 / 2025

Final Exam Principle of Embryology

الإمتحان في 4 ورقات

50 marks

QI: Choose the best single correct answer

(30 marks; each point 1 M)

- What are the two principal ways egg cells and sperm cells are brought together?
a) Asexual and sexual
b) Internal and External fertilization
c) Mitotic and meiotic
d) Oviparous and viviparous
- External fertilization is almost limited to which type of animals?
a) Terrestrial animals
b) Aquatic animals
c) Aerial animals
d) Arboreal animals
- Which animals typically perform internal fertilization?
a) Nearly all aquatic invertebrates
b) Most fishes
c) Most terrestrial animals
d) Many amphibians
- Animals where fertilized eggs pass outside the body to complete their development are called:
a) Viviparous
b) Ovoviviparous
c) Oviparous
d) Parthenogenetic
- Mammals, where living young develop from eggs retained within the mother's body, are known as:
a) Oviparous
b) Ovoviviparous
c) Viviparous
d) Parthenogenetic
- In ovoviviparous animals, how does the developing young receive nourishment?
a) From the mother's bloodstream
b) From nutrient materials stored in the eggs
c) From external food sources
d) From the male parent
- Which layer of the mammalian egg is non-cellular?
a) Plasma membrane
b) Corona radiata
c) Zona pellucida
d) Cumulus oophorus
- What is the first enzyme released by sperm to penetrate the cumulus cells of the mammalian egg?
a) Acrosin
b) Trypsin-like enzyme
c) Corona penetrating enzyme (CPE)
d) Hyaluronidase